

State of Nebraska

# 2016 Annual Report

## Traffic Crash Facts



Prepared By  
Highway Safety/Accident Records Section  
Nebraska Department of Transportation

**Pete Ricketts**  
Governor

**Kyle Scheweis, P.E.**  
Director

**NEBRASKA**

Good Life. Great Journey.

DEPARTMENT OF TRANSPORTATION



Pete Ricketts



Kyle Schneweis

The *Traffic Crash Facts* booklet provides statistics and information on traffic crash trends that occurred in Nebraska during 2016. The report is designed to heighten awareness about traffic safety issues while allowing interested individuals to identify areas where safety programs may be focused in an effort to reduce traffic-related injuries and deaths. Information is compiled from traffic crash reports submitted to the Nebraska Department of Transportation (NDOT) by state and local law enforcement agencies.

Safety is, and always will be, a top priority in how NDOT does business. The agency is committed to providing the safest possible driving environment for the residents and visitors who travel in our state each year. We are focused on utilizing partnerships with law enforcement, health and education agencies, as well as private advocacy groups and businesses, to improve driving behaviors and ultimately save lives. Traffic crashes are largely avoidable, including those that result in personal injury or loss of life.

“Zero fatalities” remains Nebraska’s traffic safety goal. While this may seem unrealistic, Nebraska continues to aim toward “zero fatalities” because every life matters. Although much progress in traffic safety has been made over the years, far too many Nebraskans—friends, neighbors, and loved ones—are still being killed or seriously injured in crashes. Improving the situation begins with setting a good example for youth by always buckling up, keeping our hands on the wheel and our eyes on the road, and putting away the cell phone while driving.

Pete Ricketts  
Governor

Kyle Schneweis, P.E.  
Director

# Nebraska Strategic Highway Safety Plan

The Nebraska Interagency Safety Committee, comprised of leaders from the Department of Transportation, State Patrol, Department of Motor Vehicles, Health & Human Services System, Local Technical Assistance Program, League of Municipalities, and Association of County Officials, recently updated the Nebraska Strategic Highway Safety Plan (SHSP) for 2017-2021. The objective of the plan is to significantly reduce traffic deaths and serious injuries in the state. To accomplish this objective, the Committee selected five Critical Emphasis Areas, based on the crash data, on which to concentrate their efforts. These five Critical Emphasis Areas were:

## 1. Increasing Seat Belt Usage

The use of seat belts is an effective way to prevent serious injuries and fatalities in traffic crashes. While surveys indicate that over 80% of Nebraskans wear their seat belts, about 7 in 10 vehicle occupants killed in crashes were not using belts. Reaching the remaining 20% of Nebraskans who avoid restraint use is a difficult problem. Overtime enforcement operations emphasizing safety belt compliance such as “Click It or Ticket” are one method used to fight the problem.

## 2. Reducing Roadway Departure Crashes

Many of our rural fatalities are the result of Roadway Departure crashes. The term “Roadway Departure” includes crashes where vehicles run-off-the-road and collide with fixed objects (trees, guardrail, poles, etc.) or where vehicles overturn. It also includes crashes where vehicles leave the portion of the road designed for them to drive on, such as head-on and cross-median crashes. The Department of Transportation has implemented the use of shoulder and centerline rumble strips as countermeasures for these types of crashes on state highways.

## 3. Reducing Impaired Driving Crashes

Crashes involving drinking and driving continue to significantly contribute to the state’s fatality total. Although Nebraska is among the nation’s leading states in effective public policy countermeasures, this factor remains a challenging one. While the long term trend in alcohol-involved crashes is down, over 20% of the drivers involved in 2016 fatal crashes had been drinking. Increasing sobriety checkpoints, periodic impaired driver enforcement crackdowns, new prosecution strategies, and public information campaigns are among the countermeasures used to combat the problem.

#### **4. Reducing Intersection Crashes**

Since these are the places where vehicles cross paths, a large percentage of traffic crashes naturally occur at intersections. The Department of Transportation is constantly reviewing intersection operations to look for improvements that can be made. Adding turn lanes, adjusting signal timing, and improving marking and signing are just a few ways intersection operations can be improved. The Department is also committed to using newer types of intersections, such as roundabouts, which have been proven to reduce crashes.

#### **5. Reducing Young Driver Crashes**

The continuing over-involvement of young, inexperienced drivers in crashes and especially fatal crashes is disturbing. Although they made up less than 8% of registered drivers in the state during 2016, drivers aged 16 to 20 were involved in 16% of the crashes. Effective programs aimed at reducing younger driver crashes are offered by several agencies, both public and private.

## Table of Contents

	Page No.
Definitions.....	ii
<b><u>Part I - Overview</u></b>	
Fatality Rate per 100 Million Vehicle Miles.....	2
Ten-Year Trend in Fatal Crashes.....	3
All Crashes in Nebraska.....	3
Geographic Summary of Traffic Fatalities by County.....	4
Crash Data by County.....	5
<b><u>Part II - 2016 Data</u></b>	
Summary - Number of Traffic Crashes.....	8
First Harmful Event: All and Fatal Crashes.....	9
Surface Condition: All and Fatal Crashes.....	11
Type of Roadway: All and Fatal Crashes.....	12
Day and Time.....	14
Month: All and Fatal Crashes.....	15
Age: Driver and Casualties.....	16
Sex: Driver.....	17
Restraint Use.....	18
Motorcycle Crashes.....	20
Body Style: All and Fatal Crashes.....	21
Intersection Crashes.....	22
Non-Intersection Crashes.....	23
Alcohol Involvement: PDO, Injury and Fatal Crashes.....	24
Driver Age and Alcohol Involvement.....	25
Driver Contributing Circumstances.....	26
<b><u>Part III - Crash Trends</u></b>	
Motor Vehicle Traffic Crash Information.....	28
Body Style: Passenger Cars and Truck Types.....	28
Pedestrian/Pedalcycle and Alcohol Involvement in Crashes.....	30
Animal and Railroad Crashes.....	31
Work Zone Crashes.....	32

*(Note: Due to rounding, percentages on graphs may not equal 100%.)*

The data contained in this booklet are based on Reportable Crashes Only as defined below. Definitions of various crash categories are also provided.

## Definitions

- Reportable Crash** ..... A crash which involves death, injury, or property damage in excess of \$1,000.00 to the property of any one person.
- All Crashes** ..... The total number of reportable motor vehicle crashes including fatal, injury or property damage.
- Fatal Crash** ..... Motor vehicle crash that results in fatal injuries to one or more persons.
- Injury Crash** ..... Motor vehicle crash that results in injuries, other than fatal, to one or more persons.
- Property Damage Only Crash (PDO)** ..... Motor vehicle crash in which there is no injury to any person, but only damage to a motor vehicle, or to other property, including injury to domestic animals.

Part I  
**Overview**

# Fatality Rate

The fatality rate on Nebraska roadways during 2016 was 1.05 persons killed per 100 million vehicle miles traveled. This is down from 1.22 in 2015, continuing the overall trend of declining fatality rates. This trend, as shown in Figure 1, has been going on for many years and, despite occasional fluctuations, is significantly downward. Much of this reduction can be attributed to improvements in vehicle design, roadway engineering, emergency medical services, specific safety programs, enforcement and improved driver awareness.

Figure 2 depicts the number of fatal crashes per year for the last 10 years. In 2016, there were 194 fatal crashes, a decrease of 24 from 2015.

Fatal crashes make up only a small portion of the total crashes in Nebraska. Property damage only (PDO) crashes make up the majority. Figure 3 shows the percentage distribution of all crash types. In 2016, there were 194 fatal crashes, 1,315 serious injury crashes, 12,262 total injury crashes, and 22,434 property damage only crashes. Fatal crashes made up .6% of all crashes, serious injury crashes made up 3.8%, and total injury and PDO crashes made up 35.1% and 64.3%, respectively.

**Fatality Rate Per 100 Million Vehicle Miles**  
(1966 - 2016)



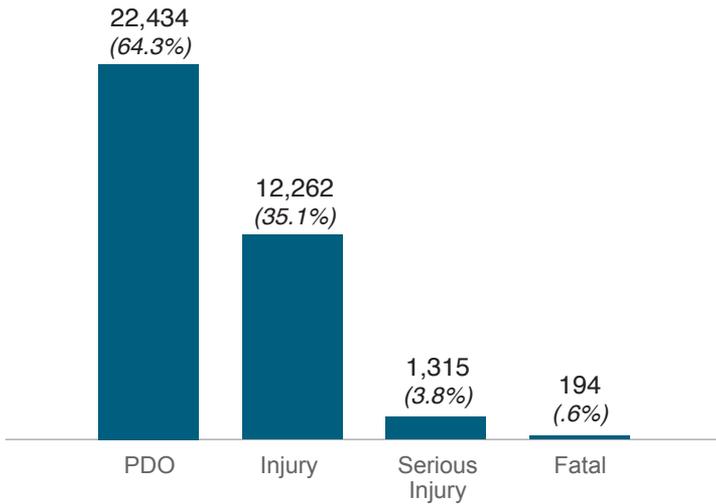
(Figure 1)

## Ten-Year Trend in Fatal Crashes and Fatalities (2007 - 2016)



(Figure 2)

## All Crashes in Nebraska



(Figure 3)



## 2016 Crash Data by County

County	Crashes				Persons Killed and Injured	
	Total	Fatal	Injury	PDO	Killed	Injured
Adams	553	5	143	405	5	214
Antelope	82	2	22	58	2	38
Arthur	6	0	0	6	0	0
Banner	23	0	2	21	0	4
Blaine	3	0	1	2	0	1
Boone	65	0	17	48	0	19
Box Butte	190	1	52	137	1	76
Boyd	9	1	2	6	1	3
Brown	58	1	8	49	1	15
Buffalo	943	7	295	641	9	440
Burt	92	2	21	69	2	30
Butler	96	1	35	60	1	52
Cass	272	1	83	188	1	134
Cedar	102	3	30	69	4	41
Chase	31	1	6	24	1	11
Cherry	69	3	18	48	3	28
Cheyenne	158	1	32	125	1	43
Clay	74	1	26	47	1	41
Colfax	132	4	48	80	4	88
Cuming	124	0	50	74	0	78
Custer	164	1	48	115	1	61
Dakota	282	4	100	178	6	139
Dawes	182	1	31	150	1	41
Dawson	477	9	114	354	9	207
Deuel	50	1	14	35	1	21
Dixon	52	0	18	34	0	27
Dodge	598	3	250	345	3	384
Douglas	12,155	34	4341	7780	36	6116
Dundy	27	1	4	22	1	6
Fillmore	45	1	14	30	1	19
Franklin	51	0	13	38	0	22
Frontier	49	0	14	35	0	16
Furnas	79	0	25	54	0	32
Gage	296	3	106	187	3	157
Garden	42	0	5	37	0	6
Garfield	18	1	4	13	1	8
Gosper	55	0	14	41	0	18
Grant	2	0	0	2	0	0
Greeley	21	0	8	13	0	11
Hall	1238	5	396	837	5	595
Hamilton	220	1	53	166	1	81
Harlan	77	1	19	57	1	28
Hayes	17	0	3	14	0	3
Hitchcock	51	2	12	37	2	15
Holt	136	0	46	90	0	77
Hooker	8	0	2	6	0	3

County	Crashes				Persons Killed and Injured	
	Total	Fatal	Injury	PDO	Killed	Injured
Howard	87	0	19	68	0	31
Jefferson	143	0	26	117	0	43
Johnson	63	2	9	52	2	16
Kearney	113	4	32	77	4	39
Keith	179	1	42	136	6	77
Keya Paha	11	0	0	11	0	0
Kimball	82	1	17	64	1	25
Knox	75	3	30	42	3	43
Lancaster	6301	14	2702	3585	15	4012
Lincoln	850	9	265	576	13	386
Logan	12	0	2	10	0	3
Loup	6	0	2	4	0	2
Madison	621	8	180	433	10	281
McPherson	3	0	1	2	0	1
Merrick	142	3	51	88	4	76
Morrill	115	0	22	93	0	32
Nance	27	0	10	17	0	14
Nemaha	99	3	36	60	3	55
Nuckolls	34	0	11	23	0	16
Otoe	206	0	66	140	0	97
Pawnee	42	0	15	27	0	22
Perkins	34	0	8	26	0	8
Phelps	156	3	41	112	3	71
Pierce	93	1	33	59	1	37
Platte	700	4	197	499	4	293
Polk	59	1	20	38	1	25
Red Willow	179	0	41	138	0	60
Richardson	111	1	35	75	1	54
Rock	16	1	1	14	1	2
Saline	196	1	46	149	1	66
Sarpy	2373	7	979	1387	7	1483
Saunders	244	3	95	146	5	143
Scotts Bluff	697	8	220	469	9	321
Seward	257	1	95	161	1	146
Sheridan	82	2	27	53	2	39
Sherman	26	1	14	11	1	16
Sioux	14	1	5	8	1	5
Stanton	47	0	26	21	0	38
Thayer	72	1	21	50	1	32
Thomas	14	0	4	10	0	5
Thurston	43	3	20	20	3	32
Valley	49	1	9	39	1	11
Washington	265	0	82	183	0	105
Wayne	110	1	51	58	1	80
Webster	68	0	19	49	0	25
Wheeler	12	0	3	9	0	7
York	288	3	87	198	4	138
<b>Totals</b>	<b>34890</b>	<b>194</b>	<b>12262</b>	<b>22434</b>	<b>218</b>	<b>17962</b>

**Part II**  
**2016 Data**

## Summary Number of Traffic Crashes

All Crashes .....	34,890
Property Damage Only (PDO) .....	22,434
Injury Crashes .....	12,262
<i>Persons Injured</i> .....	17,962
Fatal Crashes .....	194
<i>Fatalities</i> .....	218
Number of Registered Vehicles in Nebraska .....	2,421,231
Number of Licensed Drivers in Nebraska .....	1,443,062
Number of Vehicles in Crashes* .....	60,580
Number of Drivers in Crashes* .....	57,961

\*There may be more than one vehicle or driver involved in a single crash. Parked and driverless vehicles are included.

### During 2016:

One crash occurred every 15 minutes.  
Forty-nine persons were injured each day.  
One person was killed every 40 hours.

The economic loss in terms of dollars was \$2,243,643,800\*\*

\*\**Federal Highway Administration Research Report Number, FHWA-RD-91-055, The Cost of Highway Crashes, October 1991; Nebraska Department of Roads Accident Data 2011-2012; Adjusted to October 2015 costs using the Gross Domestic Product (GDP) Implicit Price Deflator, U.S. Department of Commerce, Bureau of Economic Analysis (2016).*

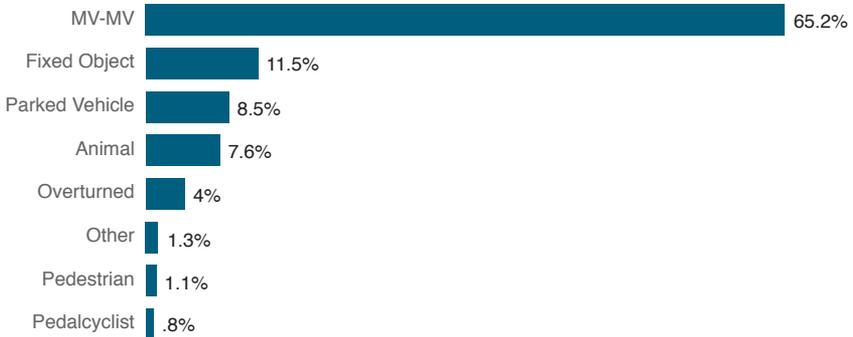
# First Harmful Event

First harmful event (FHE) is the initial incident that causes injury or damage. It is sometimes referred to as “type of crash” and implies a collision with each of the objects listed in the following charts. “Overturned” and “other” crashes refer to crashes where no collision is involved (e.g., a car loses control and overturns, a car catches on fire).

First harmful events for all crashes and for fatal crashes are shown in Figures 5 and 6. In both instances, collisions between two or more motor vehicles (MV-MV) make up the majority of crashes. Crashes involving fixed objects, vehicles overturning, pedestrians and trains tend to be more severe, as indicated by their over-representation in fatal crashes as compared to all crashes.

## All Crashes

(Figure 5)



## Fatal Crashes

(Figure 6)

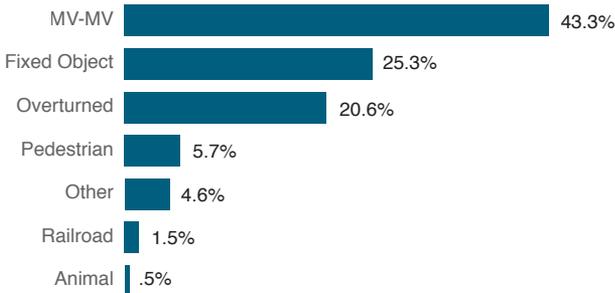


Table 1 provides the number of crashes in each category listed in Figures 5 and 6 on the previous page.

FIRST HARMFUL EVENT (Current Year)		2016								
		CRASHES				PERSONS KILLED OR INJURED				
		TOTAL	FATAL	INJURY	PDO	KILLED	NON-FATAL INJURIES			
							TOTAL	A★	B★	C★
COLLISION INVOLVING	Pedestrian	372	11	359	2	11	380	75	164	141
	Motor vehicle in transport	22712	84	8879	13749	103	13783	902	3146	9735
	Parked motor vehicle	2959	1	259	2699	1	316	31	136	149
	Railroad train	24	3	8	13	3	12	2	5	5
	Pedalcyclist	286	1	281	4	1	292	29	169	94
	Animal	2648	1	230	2417	1	287	16	91	180
	Fixed object	4019	49	1276	2694	53	1584	272	619	693
	Other object	193	1	26	166	1	30	3	9	18
	Noncollision overturned	1397	40	874	483	41	1196	242	487	467
	Other noncollision	247	3	63	181	3	75	12	35	28
Unknown	33	0	7	26	0	7	4	2	1	
— TOTALS —		34890	194	12262	22434	218	17962	1588	4863	11511

(Table 1)

- ★ = Injury severity codes
- A = Suspected Serious Injury
- B = Visible Injury (not disabling)
- C = Possible Injury (not visible)
- PDO = Property Damage Only

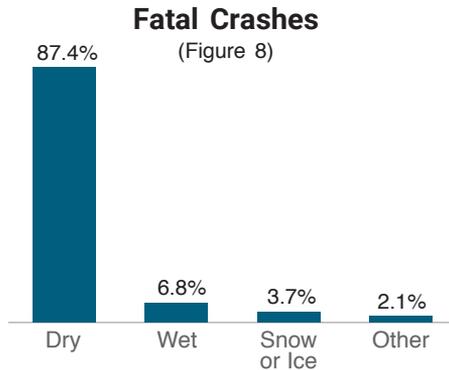
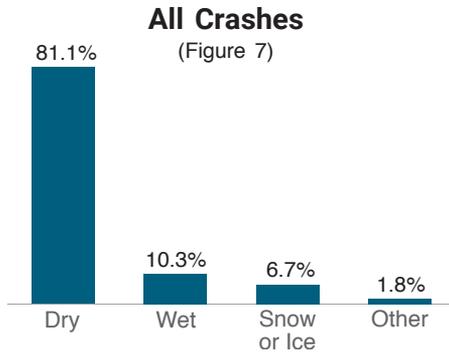
FIRST HARMFUL EVENT		2015								
		CRASHES				PERSONS KILLED OR INJURED				
		TOTAL	FATAL	INJURY	PDO	KILLED	NON-FATAL INJURIES			
							TOTAL	A★	B★	C★
COLLISION INVOLVING	Pedestrian	390	18	372	0	18	401	83	174	144
	Motor vehicle in transport	21776	97	8361	13318	116	12773	833	2782	9158
	Parked motor vehicle	2843	2	227	2614	2	265	27	107	131
	Railroad train	16	1	6	9	1	6	0	4	2
	Pedalcyclist	290	4	284	2	4	295	36	175	84
	Animal	2709	3	195	2511	4	226	30	71	125
	Fixed object	3919	41	1188	2690	45	1480	252	558	670
	Other object	192	1	29	162	1	33	5	14	14
	Noncollision overturned	1510	46	893	571	50	1213	233	492	488
	Other noncollision	307	4	88	215	4	104	19	47	38
Unknown	36	1	6	29	1	10	2	5	3	
— TOTALS —		33988	218	11649	22121	246	16806	1520	4429	10857

(Table 2)

Table 2 provides 2015 data for comparison to 2016. The number of fatal crashes and fatalities both declined, fatal crashes by 24 and fatalities by 28. The number of injury crashes went up by 613, and the number of injuries increased by 1,156. Property damage only crashes also rose by 313.

# Surface Condition

The condition of the road surface plays an important role in motor vehicle crashes. Slick road conditions are generally more hazardous than dry conditions, but drivers tend to compensate for this by being more cautious. Fewer fatal crashes occur under slick road surface conditions than under dry road conditions, since there are many more dry days than wet days. Crashes on wet roads decreased by 12.8% during 2016.



The following table provides the number of crashes in each category.

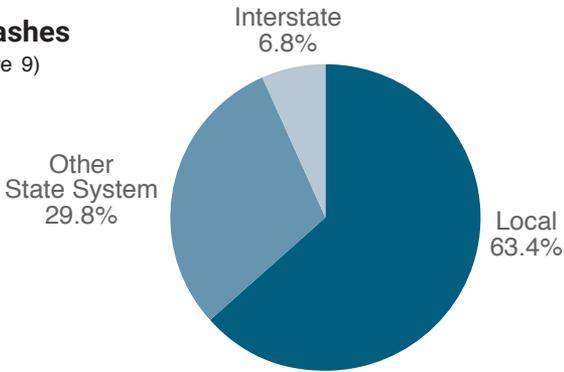
ROAD SURFACE CONDITION	TOTAL	FATAL	INJURY	PDO
Dry	27799	167	10045	17587
Wet	3545	13	1255	2277
Snowy or icy	2309	7	611	1691
Other	605	4	232	369
Not stated	632	3	119	510
— TOTALS —	34890	194	12262	22434

(Table 3)

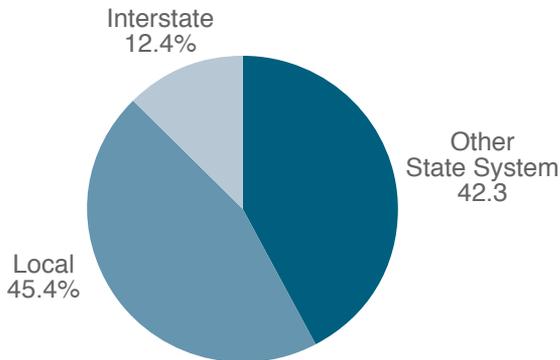
# Type of Roadway

The distributions of all crashes and fatal crashes, by roadway type, are shown in Figures 9 and 10. Table 4 (page 13) shows the actual number of crashes and casualties by roadway type. The percent of fatal crashes that occur on the interstate and on other state highways is larger than the percent of all crashes that occur on the interstate and on other state highways. Crashes on interstate and other state highways tend to occur at higher speeds, accounting for their increased severity.

**All Crashes**  
(Figure 9)



**Fatal Crashes**  
(Figure 10)



ROADWAY		CRASHES				PERSONS	
		TOTAL	FATAL	INJURY	PDO	KILLED	INJURED
URBAN	Interstate	1295	6	459	830	6	624
	Other State System Highways	6011	15	2330	3666	15	3564
	Local Roads and Streets	18874	35	6532	12307	35	9283
	URBAN SUBTOTAL	26180	56	9321	16803	56	13471
RURAL	Interstate	1080	18	296	766	27	536
	Other State System Highways	4383	67	1342	2974	78	2054
	Local Roads and Streets	3247	53	1303	1891	57	1901
	RURAL SUBTOTAL	8710	138	2941	5631	162	4491
— TOTALS —		34890	194	12262	22434	218	17962

(Table 4)

Rather than referring to numbers of crashes, the relative safety of different roadway classifications can be compared by using crash rates. Table 5 provides crash rates for 2016. These rates are based on crashes per 100 million vehicle miles driven.

### Crashes Per 100 Million Vehicle Miles Traveled

	CRASH SEVERITY			
	FATAL	INJURY	PDO	TOTAL
Interstate	0.5	16.8	35.4	52.7
Other State Highways	0.9	42.4	76.8	120.1
Local Roads and Streets	1.2	103.8	188.1	293.0

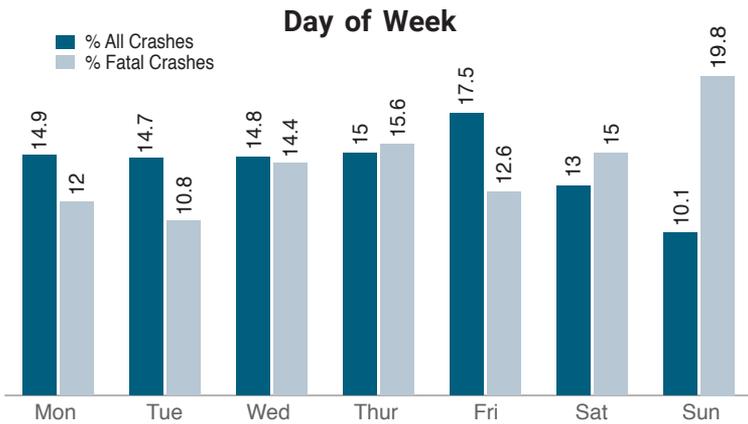
(Table 5)

The interstate actually has the lowest crash rate for all roadway categories, followed by other state highways and local roads.

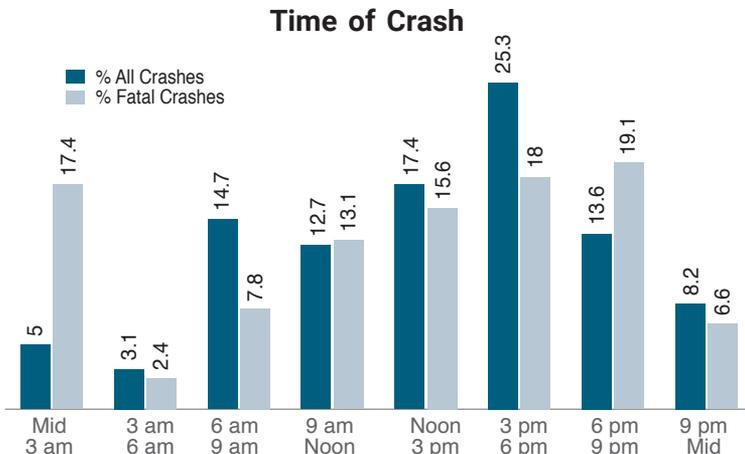
# Day and Time

Crashes can occur at any time, but they tend to be more frequent during certain times of the day. Crash frequency follows the daily activity cycle, increasing from a low in the early morning hours to a peak in the late afternoon. The highest three-hour time period for crashes in 2016 was from 3:00 - 6:00 p.m., when 25.3% of all crashes occurred. Fatal crashes were most prevalent in the afternoon or early evening, as 52.7% of them took place between noon and 9:00 p.m.

Crash trends on weekends differ from those which take place during the week. In 2016, Sunday was the lowest day for total crashes, 10.1%, but the highest day for fatal crashes, 19.8%. Friday was the highest day for total crashes, 17.5%.



(Figure 11)



(Figure 12)

# Month

The seasonal cycles of all crashes and fatal crashes are illustrated in Figures 13 and 14. Crashes tend to increase during the late fall and winter as weather conditions worsen. Fatal crashes usually decrease during bad weather conditions, once motorists adjust to less than perfect driving conditions.

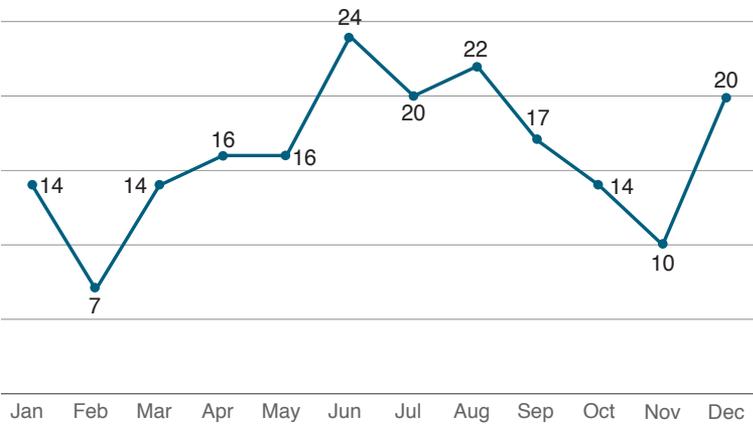
## All Crashes by Month

(Figure 13)



## Fatal Crashes by Month

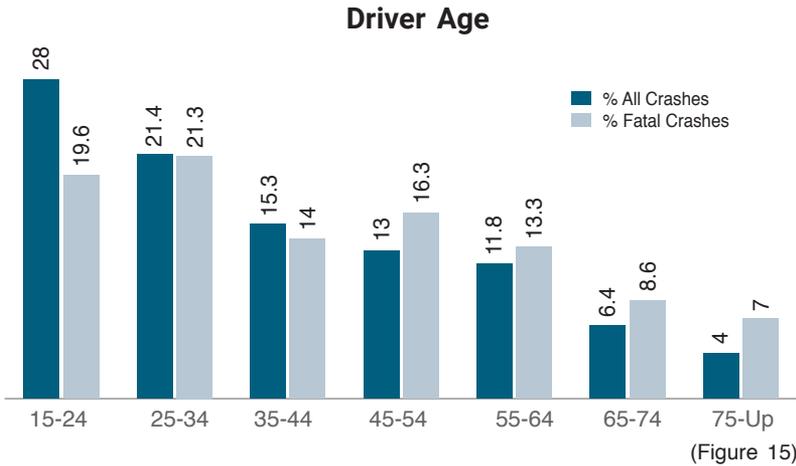
(Figure 14)



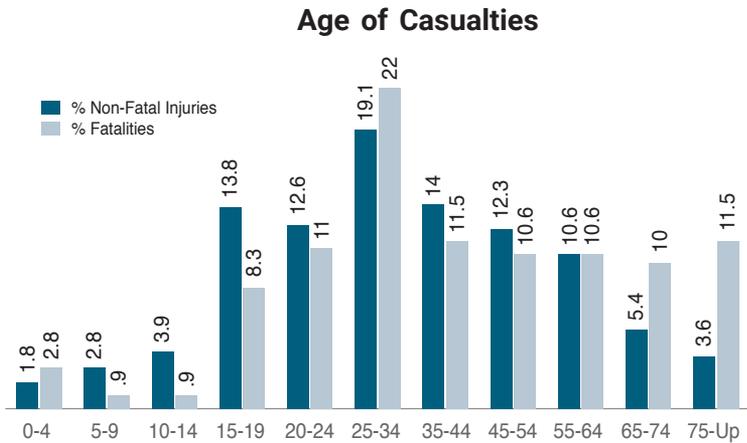
# Age of Driver

Younger drivers are involved in a disproportionate number of crashes. In 2016, 49.4% of the drivers involved in crashes were age 34 or younger. Drivers in the youngest age bracket, ages 15 to 24, had the highest percentage involvement of all age groups in all crashes, 28%. In 2016, these drivers were also involved in 19.8% of fatal crashes.

Figure 16 represents percentages of nonfatal and fatal injuries by age groups. Persons aged 65 and over are overrepresented in fatal injuries as compared to nonfatal injuries. Persons between the ages of 15 and 44 suffered 59.5% of all injuries.



(Figure 15)



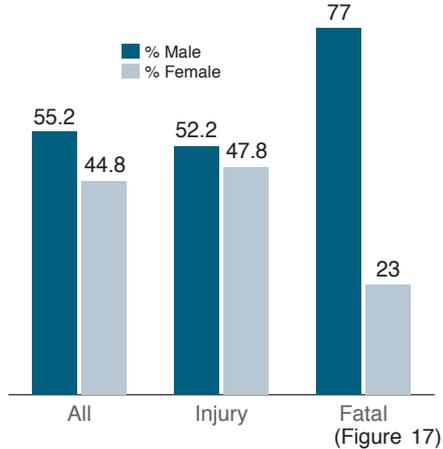
(Figure 16)

# Sex of Driver

Figure 17 shows the difference between male and female drivers' involvement in motor vehicle traffic crashes. Males represented 55.2% of the drivers in all crashes in Nebraska in 2016, and were involved in 77% of all fatal crashes. At least a part of this difference can be attributed to the fact that males may drive more miles than females and, thus, have greater exposure to crashes.

More females than males, however, are victims of motor vehicle crashes. Females made up 55% of the persons injured or killed in motor vehicle crashes in 2016. (See Table 7).

### Sex of Driver in Crashes



SEX OF DRIVER	TOTAL	FATAL	INJURY	PDO
Male	31724	231	11606	19887
Female	25745	69	10626	15050
Not stated	492	1	195	296
– TOTALS –	57961	301	22427	35233

(Table 6)

AGE AND SEX	ALL CRASHES						ALCOHOL-RELATED CRASHES					
	KILLED			INJURED			KILLED			INJURED		
	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F
0-4 years	6	5	1	314	154	160	0	0	0	19	14	5
5-9 years	2	0	2	493	223	270	0	0	0	18	10	8
10-14 years	2	1	1	685	320	365	0	0	0	16	9	7
15-19 years	18	8	10	2411	1023	1388	8	4	4	122	66	56
20-24 years	24	17	7	2188	1004	1184	13	8	5	215	135	80
25-34 years	48	37	11	3328	1473	1855	26	22	4	326	212	114
35-44 years	25	23	2	2434	1074	1360	11	11	0	169	99	70
45-54 years	23	20	3	2144	942	1202	12	12	0	146	94	52
55-64 years	23	14	9	1847	876	971	4	2	2	107	64	43
65-74 years	22	15	7	939	428	511	2	2	0	28	15	13
75 and older	25	14	11	631	272	359	5	3	2	8	4	4
Age not stated	0	0	0	175	79	96	0	0	0	11	6	5
– TOTALS –	218	154	64	17589	7868	9721	81	64	17	1185	728	457

(Table 7)

# Restraint Use

Restraint usage is the best available means of preventing fatalities and injuries in motor vehicle crashes. Passive restraints, such as air bags, which require no occupant action to be put in use, are standard equipment for drivers and front seat passengers in newer vehicles. For these passive systems to provide effective protection, however, seat belts must still be used.

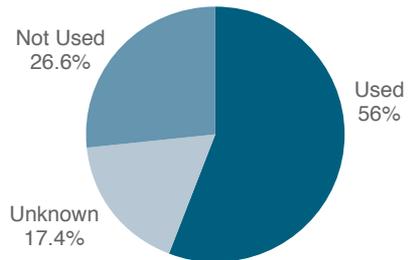
Effective January 1, 1993, Nebraska passed a mandatory seat belt law. This law calls for secondary enforcement, meaning that a citation for not wearing a seat belt can only be issued if the driver is first charged with another violation. Although not as effective as a primary enforcement law, the law has been successful in promoting seat belt use.

The most accurate measure of safety belt usage in Nebraska comes from the results of surveys conducted by the NDOT Highway Safety Office and approved by the National Highway Traffic Safety Administration (NHTSA). In 2016, the observed statewide safety belt usage rate was 83%.

Usage rates have risen in recent years primarily due to increased law enforcement efforts and media campaigns, however, there is still room for improvement. Belt use is particularly low in accidents which result in the most severe injuries. Only 35.8% of those vehicle occupants who died and 56% of those who suffered suspected serious injuries in 2016 crashes were belted.

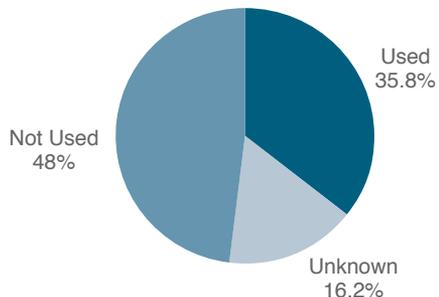
## Restraint Use for Suspected Serious Injuries

(Figure 18)

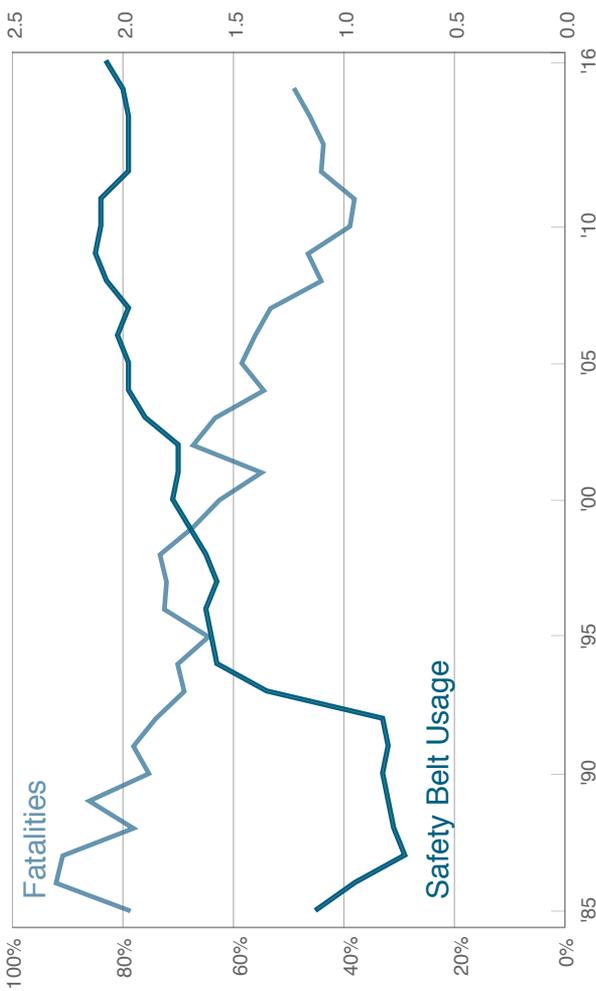


## Restraint Use for Fatal Injuries

(Figure 19)



## Nebraska Safety Belt Usage Rate vs. Fatality Rate *Per 100 Million Miles Traveled*



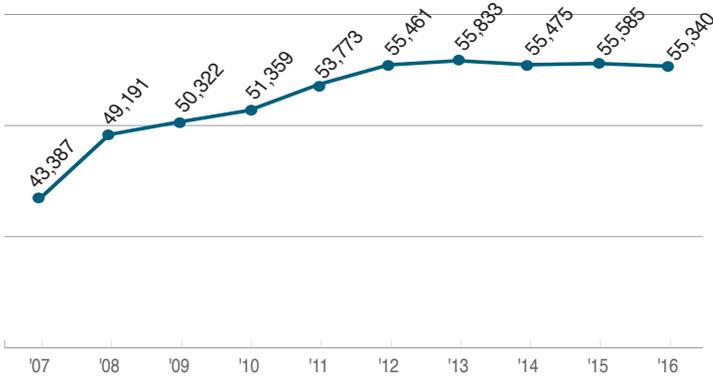
(Figure 20)

# Motorcycle Crashes

After trending sharply upwards earlier in the decade, motorcycle registrations plateaued during the last few years. Total motorcycle crashes increased to 514, which was still the second lowest total since 2007. Fatal crashes declined to 20 from the decade-high of 25 in 2015.

## Motorcycle Registrations

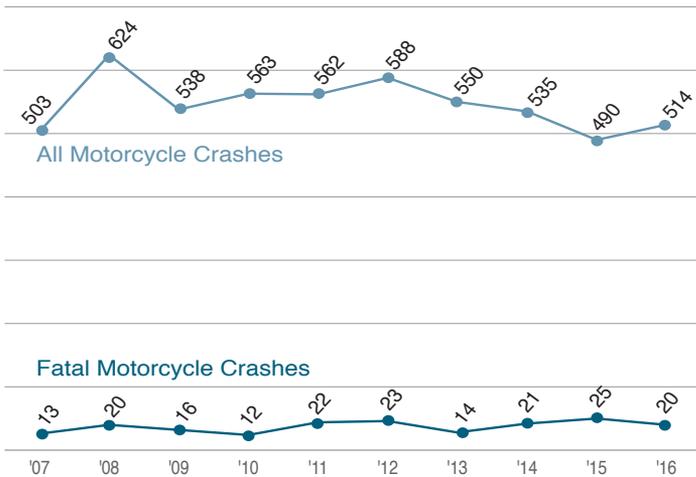
(2007 - 2016)



(Figure 21)

## All Motorcycle Crashes and Fatalities

(2007 - 2016)



(Figure 22)

# Vehicle Body Style

The major vehicle body styles involved in all crashes and fatal crashes are displayed in Figures 23 and 24. Compared to their involvement in all crashes, motorcycles and heavy trucks are overrepresented in fatal crashes. Motorcycles offer little protection to riders involved in crashes, and heavy trucks tend to be involved in more severe crashes due to their large size. The number of vehicles in each body style group which were involved in crashes is provided in the table.

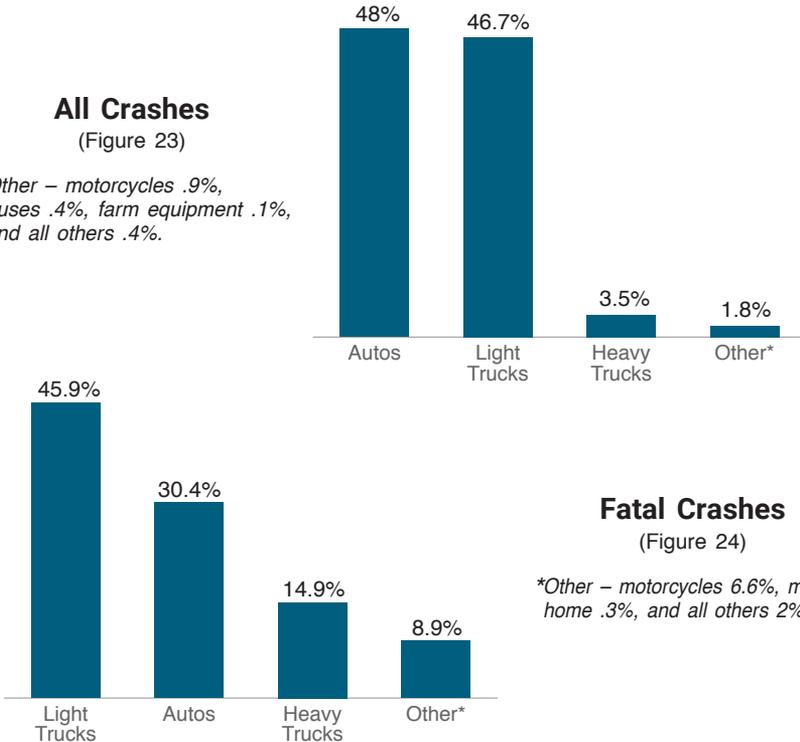
BODY STYLE OF CRASH VEHICLES	TOTAL	FATAL	INJURY	PDO
Bus	256	0	75	181
Semi-trailer truck	1152	34	324	794
Other heavy truck	898	11	286	601
Automobile	28186	92	11020	17074
Van	3485	14	1425	2046
Utility vehicle	14376	54	5597	8725
Pickup truck	9526	71	3291	6164
Motorcycle	522	20	458	44
Motorhome	24	1	7	16
Farm equipment	66	0	23	43
Other	210	6	65	139
Unknown	1879	1	333	1545
— TOTALS —	60580	304	22904	37372

(Table 8)

## All Crashes

(Figure 23)

\*Other – motorcycles .9%, buses .4%, farm equipment .1%, and all others .4%.



## Fatal Crashes

(Figure 24)

\*Other – motorcycles 6.6%, motor home .3%, and all others 2%.

# Intersection Crashes

2016

## Type of Multi-Vehicle Collisions at Intersections\*

Total Crashes: 17,323

	NUMBER OF CRASHES	% OF TOTAL INTERSECTION CRASHES	% RESULTING IN INJURY
 Angle	6,935	40.0	42.5
 Rear-end	6,083	35.1	43.9
 Sideswipe	1,497	8.6	19.2
 Sideswipe	166	1.0	28.3
 Left Turn Leaving	2,214	12.8	49.2
 Head-on	54	.3	57.4
 Backing	374	2.2	16.3
Unknown	0	0	0
<b>Total</b>	<b>17,323</b>	<b>100%</b>	

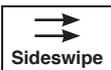
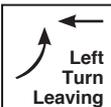
\* Multi-vehicle crashes at intersections comprise 49.7% of all crashes.

# Non-Intersection Crashes

2016

## Type of Multi-Vehicle Collisions Not at Intersections\*

Total Crashes: 5,389

	NUMBER OF CRASHES	% OF TOTAL NON-INTERSECTION CRASHES	% RESULTING IN INJURY
 Rear-end	3,047	56.6	39.9
 Head-on	86	1.6	72.1
 Angle	204	3.8	36.8
 Sideswipe	1,339	24.9	19.3
 Sideswipe	350	6.5	42.9
 Left Turn Leaving	24	0.4	83.3
 Backing	332	6.2	13.3
Unknown	7	0.1	0
<b>Total</b>	<b>5,389</b>	<b>100%</b>	

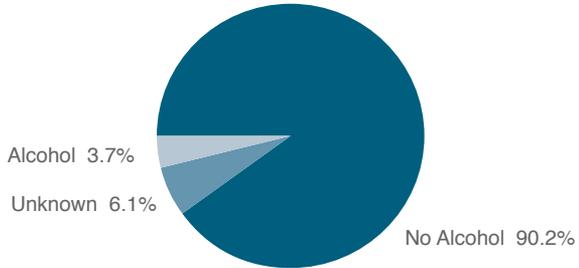
\* Multi-vehicle crashes not at intersections comprise 15.4% of all crashes.

# Alcohol Involvement

Figures 25, 26 and 27 show the relationship between alcohol involvement and crash severity. As crash severity increased, so did alcohol involvement. In 2016, 37.6% of Nebraska's fatal crashes were alcohol-involved, an increase from the 32.6% recorded in 2015. Since alcohol testing is only required in fatal crashes, the alcohol involvement listed for injury and PDO crashes is probably understated.

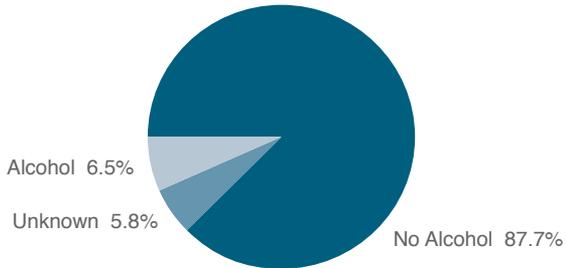
## PDO Crashes

(Figure 25)



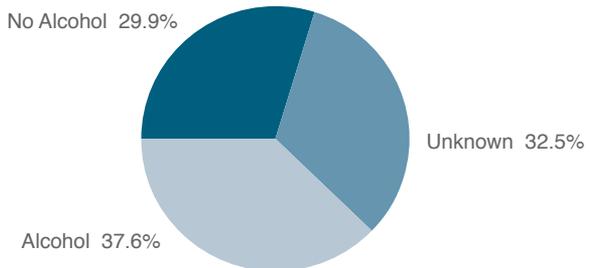
## Injury Crashes

(Figure 26)



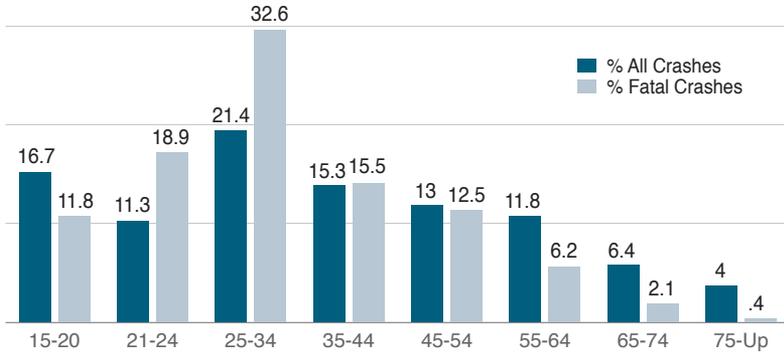
## Fatal Crashes

(Figure 27)



# Driver Age and Alcohol Involvement

The relationship between driver age and alcohol involvement in motor vehicle crashes is illustrated in Figure 28. Compared to their involvement in all crashes, drivers aged 21-34 are overrepresented in alcohol related crashes. In fact, these drivers are in 51.5% of alcohol involved crashes. Drivers aged 21-24 are most overrepresented, being involved in 18.9% of alcohol-related crashes but only 11.3% of all crashes. Note that drivers between the ages of 15 and 20 are in 11.8% of alcohol-related crashes, despite the fact that the legal drinking age in Nebraska is 21.



(Figure 28)

AGE OF DRIVER	TOTAL		FATAL		INJURY	
	ALL CRASHES	ALCOHOL INVOLVED	ALL CRASHES	ALCOHOL INVOLVED	ALL CRASHES	ALCOHOL INVOLVED
15 and younger	365	3	0	0	151	2
16	1761	9	6	0	687	7
17	1824	20	3	1	705	9
18	1986	42	6	2	776	22
19	1857	49	4	2	722	23
20	1843	64	7	1	729	35
21	1691	77	9	1	624	29
22	1641	76	8	4	584	28
23	1563	76	5	2	559	32
24	1605	70	11	6	629	27
25 to 34	12341	516	64	22	4883	244
35 to 44	8809	246	42	7	3531	111
45 to 54	7518	198	49	14	2992	94
55 to 64	6792	98	40	5	2583	54
65 to 74	3713	33	26	2	1308	11
75 and older	2317	6	21	1	872	1
Not stated	335	4	0	0	92	1
— TOTALS —	57961	1587	301	70	22427	730

(Table 9)

# Driver Contributing Circumstances

In 2016, there were 34,890 reportable motor vehicle traffic crashes in Nebraska involving 57,961 drivers. The table below lists the driver contributing circumstances and the number of drivers involved in fatal, injury and property damage only crashes.

<b>DRIVER CONTRIBUTING CIRCUMSTANCES</b>	<b>TOTAL</b>	<b>FATAL</b>	<b>INJURY</b>	<b>PDO</b>
No improper driving	28010	111	10853	17046
Failed to yield right-of-way	5814	27	2420	3367
Disregarded traffic controls	1857	12	937	908
Exceeded speed limit	147	8	77	62
Speed too fast for conditions	1368	10	467	891
Made an improper turn	601	2	140	459
Followed too closely	5056	2	1993	3061
Leave lane/run off road	1867	29	660	1178
Operating in erratic manner	2433	30	1098	1305
Swerving or avoiding	486	0	184	302
Visibility obstructed	401	0	107	294
Inattention	3649	9	1224	2416
Mobile phone distraction	144	0	59	85
Distracted - other	662	1	262	399
Fatigued/asleep	318	2	138	178
Defective equipment	196	1	79	116
Other improper action	1453	19	547	887
Unknown	3499	38	1182	2279
— TOTALS —	57961	301	22427	35233

(Table 10)

While “Failed to yield right-of-way” was the most common contributing circumstance in all crashes, in fatal crashes “Operating in erratic manner” was the most frequent.

Part III  
**Crash Trends**

# Motor Vehicle Traffic Crash Data

After trending downward earlier in the decade, the Nebraska crash rate increased over the last four years. The fatality rate, on the other hand, has been erratic in recent years, going both up and down.

Year	Total Accidents	Persons Injured	Persons Killed	Accident Rate (per MVM)	Fatality Rate (per HMVM)	National Fatality Rate (per HMVM)
'01	47,894	26,751	246	2.67	1.37	1.51
'02	46,238	23,379	307	2.51	1.67	1.51
'03	46,602	21,984	293	2.51	1.58	1.48
'04	37,227	21,315	254	2.00	1.35	1.45
'05	35,739	19,827	276	1.89	1.46	1.46
'06	32,780	18,424	269	1.72	1.40	1.42
'07	35,895	18,983	256	1.86	1.33	1.36
'08	34,604	17,799	208	1.83	1.10	1.26
'09	34,665	17,775	223	1.81	1.17	1.15
'10	33,212	16,712	190	1.69	0.97	1.11
'11	32,302	16,108	181	1.66	0.95	1.10
'12	30,443	15,872	212	1.58	1.10	1.14
'13	31,377	16,083	211	1.63	1.09	1.10
'14	32,318	15,871	225	1.65	1.15	1.08
'15	33,988	16,806	246	1.68	1.22	1.13
'16	34,890	17,962	218	1.72	1.05	1.15

*Million Vehicle Miles (MVM)*
*Hundred Million Vehicle Miles (HMVM)*

(Table 11)

## Body Style

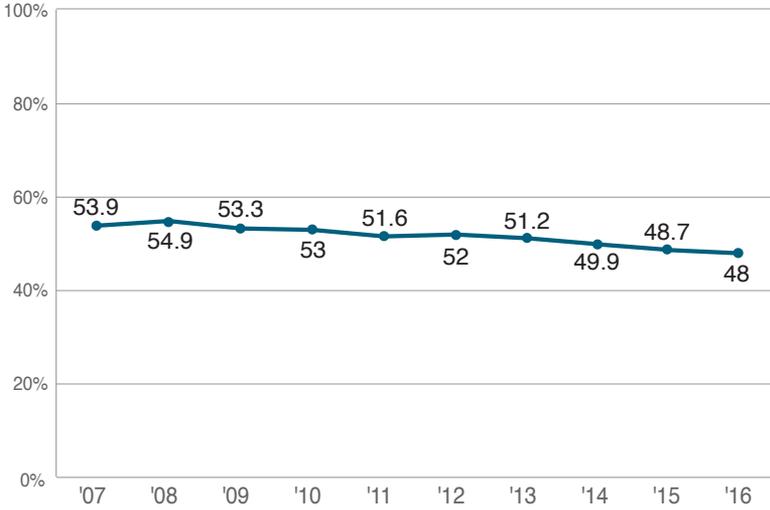
More passenger cars are involved in crashes than any other body style of vehicle. The percentage of automobiles in the total mix of vehicles in crashes, however, has been generally declining over the last decade. Figure 30 displays this trend.

Utility vehicles have been the fastest growing segment of the vehicle mix, surpassing pickup trucks and vans. The percentage of heavy trucks involved in crashes, on the other hand, has remained relatively steady. Figure 31 shows the trends in the percentage of various truck types involved in crashes during the last decade.

*Note: In any one year, the combined percentages of passenger cars, light trucks, heavy trucks and motorcycles will not total 100%. The percentage of "other" body styles, like buses, is not shown.*

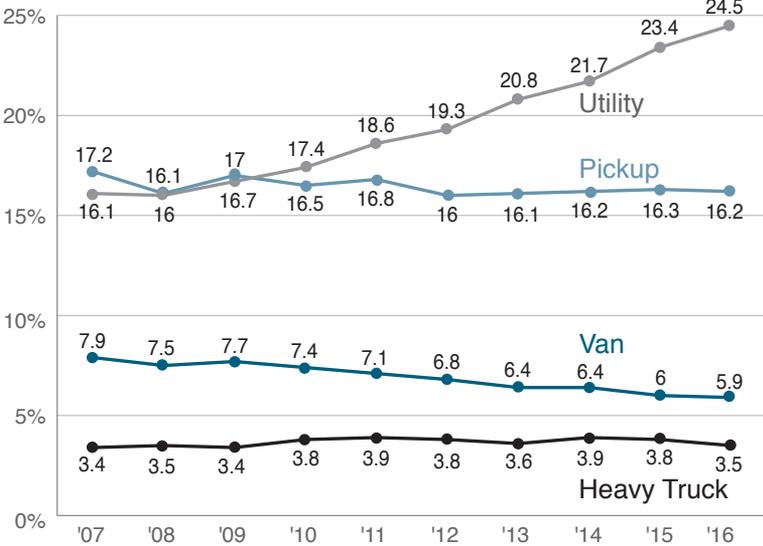
## Passenger Cars in All Crashes

(Figure 29)



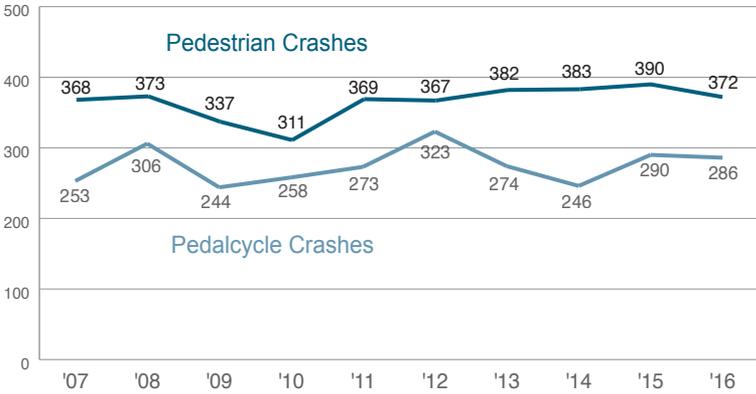
## Truck Types in All Crashes

(Figure 30)

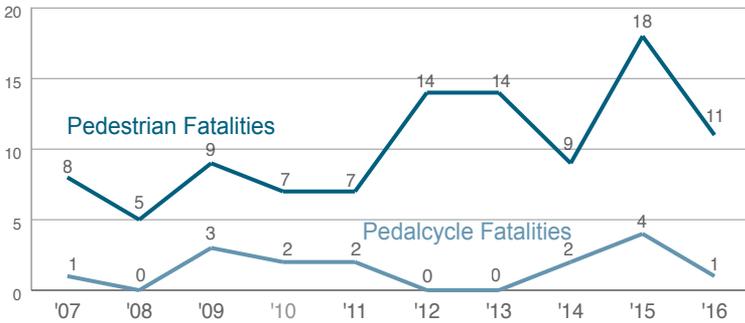


# Pedestrian and Pedalcycle Crashes

After an unusually high year in 2015, both pedestrian and pedalcycle crashes and fatalities decreased in 2016. Pedestrian crashes declined from a decade-high 390 to 372, while pedestrian fatalities fell from 18 to 11. Pedalcycle crashes decreased slightly, from 290 to 286. There was only one pedalcycle fatality in 2016, compared to four last year.



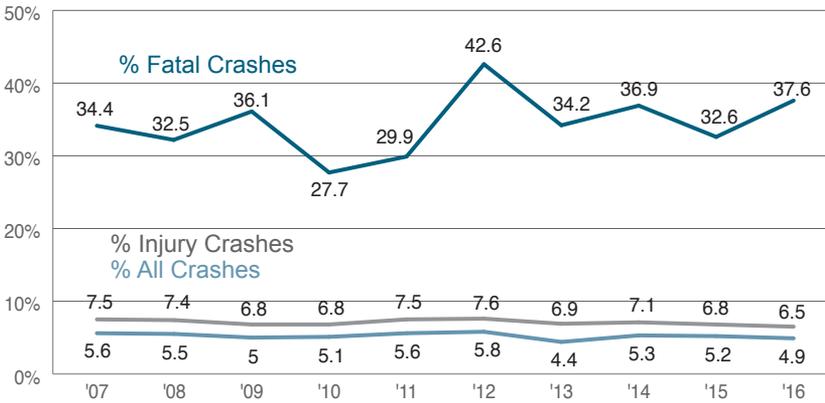
(Figure 31)



(Figure 32)

# Alcohol Involvement in Crashes

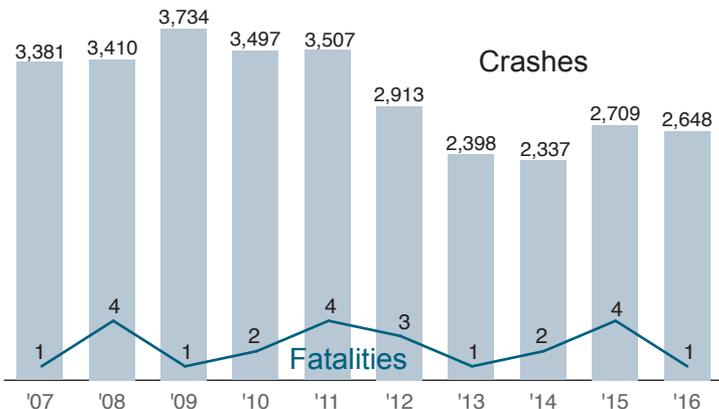
Figure 33 shows the percentage of alcohol involvement in the various types of crashes. Alcohol testing is mandatory in fatal crashes, but optional for injury and property damage only crashes. The percentage of involvement in non-fatal crashes could be misleading as to the extent of alcohol's role in crashes. Alcohol involvement in fatal crashes increased from 32.6% in 2015 to 37.6% in 2016.



(Figure 33)

# Animal Crashes

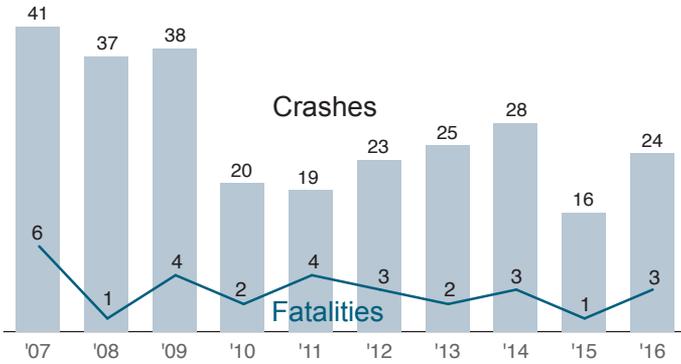
The number of crashes involving animals, over the last 10 years, is depicted in Figure 34. In 2016, animal crashes decreased from 2,709 to 2,648. Deer are the most frequently involved animals in motor vehicle/ animal crashes. Animal crashes resulted in one fatality during 2016.



(Figure 34)

# Railroad Crashes

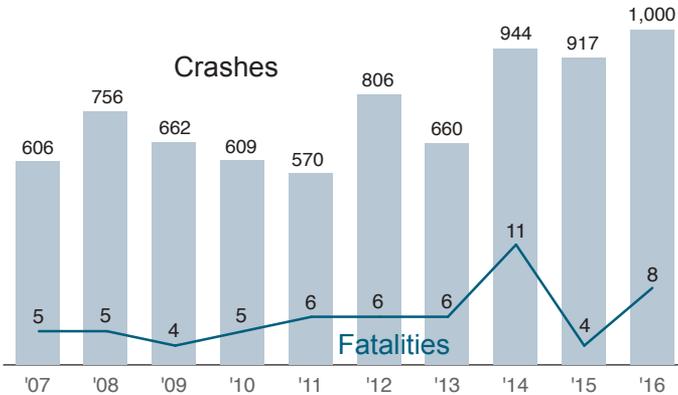
The number of motor vehicle/railroad crashes increased in 2016, from 16 to 24. Railroad fatalities also increased, from one to three.



(Figure 35)

# Work Zone Crashes

Drivers need to be particularly alert when going through highway work zones. When a road is not in its usual condition due to construction, it is a good idea to slow down. Fines for speeding double in work zones when workers are present. Work zone crashes are dangerous to both highway workers and motorists. Most work zone crashes are rear-end collisions, resulting from speeding or inattentive driving. Work zone crashes increased in 2016, from 917 to 1,000. In addition to the usual factors, the annual number of work zone crashes is also highly dependent on the amount and location of construction.



(Figure 36)



Additional information about the material contained in this publication may be obtained from:

Nebraska Department of Transportation  
Traffic Engineering Division  
Highway Safety/Accident Records Section  
PO BOX 94759  
LINCOLN NE 68509-4759  
402-479-4645

This report is also available on the NDOT website  
[dot.nebraska.gov](http://dot.nebraska.gov)

**Nebraska Department of Transportation  
Highway Safety/Accident Records Section  
1500 Highway 2  
PO Box 94759  
Lincoln NE 68509-4759  
27-6900**